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FEDERAL COMMUNICATIONS COMMISSION
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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules	)	CC Docket No. 94-102
to Ensure Compatibility with E9-1-1	)	RM-8143
Emergency Calling Systems	)	

OPPOSITION AND COMMENTS OF NENA, APCO AND NASNA

The National Emergency Number Association ("NENA"), the Association of Public-Safety Communications Officials-International, Inc. ("APCO") and the National Association of State Nine One One Administrators ("NASNA"), hereafter "Joint Commenters," oppose and comment upon the Petitions for Reconsideration filed February 17, 1998 in the above-captioned proceeding by Cellular Telecommunications Industry Association ("CTIA") and BellSouth Corporation ("BellSouth").[1]

CTIA seeks, improperly, to oust public 9-1-1 Authorities from decisions for which they must remain publicly accountable. Both Petitioners wish to suspend or defer wireless E9-1-1 obligations that should remain on the schedules the FCC has ordered. In other respects, the Petitions make suggestions the Joint Commenters either endorse or do not oppose.

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[1] The Petitions are directed to the Memorandum Opinion and Order ("Reconsideration Order"), FCC 97-402, released December 23, 1997, which resolved earlier requests for reconsideration of a First Report and Order ("First Order") in the docket, 11 FCC Rcd 18676 (1996). Receipt of the Petitions was noticed in the Federal Register of March 3, 1998, 63 Fed.Reg. 10381.

Choosing the means of delivering ANI
and ALI is a 9-1-1 Authority Responsibility.

CTIA asserts, without documentation, that some Public Safety Answering Points ("PSAPs")[2] "seek to limit the technology carriers may use to satisfy the Commission's rules." Accordingly, it asks the Commission to declare

> that it is the carrier, and not the PSAP or any other designated entity, that ultimately must select the transmission technology to adequately deliver the required information to the PSAP. (Petition, 19)

CTIA further implies that incompatible decisions by the several 9-1-1 Authorities that may serve a wireless carrier's coverage area are obstructing a "system-wide solution" and that the FCC

> should clarify that PSAPs may not destroy the market benefits through second-guessing carriers' choice of transmission technologies.

(Petition, 20-21) CTIA seeks to bolster these remarkable assertions by quoting the Reconsideration Order entirely out of context (Petition, note 45) and by proposing a ludicrous *non sequitur*: that because PSAPs no longer may choose whether to receive unsubscribed calls, they should no longer have a voice in "selecting the information transmission technology." (Petition, 21-22, including note 46)

These CTIA propositions follow hard on the heels of a request to the FCC for a reminder that Public Authorities must pay for, or at least defray the costs of, implementing Phases I and II of the wireless E9-1-1

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2 Because a single PSAP may not have final decisional authority within a State or County 9-1-1 administration, we are using the term "9-1-1 Authority" where the context requires this.

implementation schedule. (Petition, IV.A)[3] At the gut level of economics, then, the Joint Commenters strongly protest CTIA's outrageous suggestion that Public Authorities may not determine the transmission technology they are being asked to pay for.

Even if the carriers were financing Phase I, as CTIA originally promised they would, Public Authorities would still insist on selection of transmission technology. PSAPs are parts of a system that depends on wireline as well as wireless telephony. The E9-1-1 system was designed in the mid-1970s for wireline networks, and used a CAMA signaling protocol to pass Automatic Number Indentification ("ANI") through the network to the 9-1-1 router and then to the PSAP. This CAMA protocol was designed to deliver eight digits to the PSAP. The first of these, the Numbering Plan Digit ("NPD"), represents the area code and may only be a 0, 1, 2 or 3. This is followed by the seven digits of the calling party's telephone number. Because of the NPD's limitation to 0, 1, 2 or 3, it can only be used to represent four different area codes.

This was a good practice 25 years ago, but not today. The need now is for a full 10 digits in wireline calls and 20 digits in wireless calls that are received at a PSAP. For too long, 9-1-1 communications has been a stepchild in the Information Age family. For too long it has depended on CAMA tandem-to-PSAP trunks capable of carrying only eight digits of information with which to identify an emergency caller.

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[3] In a "Public Safety-Wireless Industry Consensus" filed with the Commission in February of 1996 (First Order, 11 FCC Rcd at 18687-89), CTIA agreed for the industry that Phase I could be paid by the carriers without public subsidy. Because so many CTIA member carriers objected, the Commission made Phase I obligations contingent on the availability of a "mechanism for recovering the costs of the service." [47 C.F.R.§20.18(f), 1996] CTIA now interprets the funding mechanism as public money, not carrier funds.

Since this capacity is limited to providing ANI from four area codes, it is not sufficient to identify the roaming wireless caller's 3-digit area code and 7-digit calling party number. With additional data requirements now arising from wireless Automatic Location Information ("ALI") -- in Phase I, a cell site/sector "pseudo-ANI" and in Phase II, latitude/longitude -- 9-1-1 call transmission must adapt. Wireless carriers must be able to pass 20 digits to the E9-1-1 tandem (selective router). Both the wireline network and the PSAP must be able to receive, re-transmit and use the expanded information.

For its part, NENA has adopted and put out for review a standards recommendation "for the implementation of Enhanced MF Signaling, E9-1-1 Tandem to PSAP." This represents a voluntary, but preferred, means of transmitting 10 digits for the calling party's telephone number for both wireline and wireless, and 10 additional digits for location information for wireless from the E9-1-1 tandem to the PSAP. Portions of the proposed NENA standard are attached. The Overview and Benefits Section 1.2 notes that a principal purpose of Enhanced MF Signaling, using a "Feature Group D-like protocol," is to remove the existing protocol's limitation. NENA has been careful to note, however, that it is not necessarily recommending any changes to existing MF signaling or equipment built for it.[4]

This caveat recognizes that so-called "Non-Call-Associated Signaling" ("NCAS") methods offered by third-party vendors allow 8-digit CAMA trunks to continue in use from tandem to PSAP, while arranging for the transmission of additional digits by a separate data path. CTIA refers to the NCAS alternative at several points (Petition, notes 42 and 43 and

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[4] The initial section in the Consensus document (note 3, *supra*) recognized that, up to a point, the wireless industry and the Public Authorities would have to take the wireline network as they found it.

accompanying text). Some 9-1-1 Authorities are troubled by this transmission selection since the caller's ANI will not be passed with the call over the same E9-1-1 tandem-to-PSAP trunks, as is the current practice.

Of particular concern is a failure in the ALI links or equipment or any of the associated data links. In an NCAS environment, the çaller's number would not be available at the PSAP, nor could the call be traced. Furthermore, NCAS does not lend itself to local number portability and places a burden on North American Numbering Plan resources.

Because they are operationally and financially accountable for the effective functioning of the total E9-1-1 system -- PSAP, wireline and wireless -- Public Authorities have every right to advocate enhanced signaling and compatible equipment in preference to CAMA-tolerant NCAS methods. This does not destroy but actually sharpens the competition among service suppliers and equipment vendors. The Commission must, of course, remain as "technology-neutral" as possible. This includes allowing Public Authorities to negotiate vigorously with wireline and wireless carriers and third-party vendors. We see no market failure here.

Public Authorities are not opposed
to wireline/wireless funding parity.

Without naming names,[5] CTIA posits a wireless carrier-Public Authority "cost recovery agreement" that states: Carrier pays for Phase I and Phase II by raising its rates if and as needed. That certainly qualifies as a cost recovery mechanism, since wireless carriers' rates are not publicly regulated. If CTIA dislikes this outcome, and believes the Public Authority should pay some or all of the cost, surely its members have the wherewithal

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5 "To the extent that certain PSAPs are engaging in this [buck-passing] activity . . ." (Petition, 17)

to resist. If a funding mechanism for cost recovery, in CTIA's view, involves public money (or publicly-ordered funding, such as subscriber surcharges) all the carriers need to do is hold out. For their Phase I and Phase II obligations are, in the end, conditioned upon "a mechanism for recovering the costs of the [enhanced] service." 47 C.F.R.§20.18(f) (1997).

From the outset, the Consensus Agreement spoke in terms of public appropriations, bond issues and subscriber surcharges. The Commission's orders seemed not to take issue with this view, but to rely on the existence of the agreement. A theme of non-discrimination as between wireline and wireless carrier support of 9-1-1 was sounded in the Consensus' explanation of the point. Exact parity, of course, is impossible to achieve. Some wireline carriers effectively donated goods and services to the early building of the emergency calling network. Most often, they have been compensated through publicly-regulated, tariffed charges for specific services to PSAPs. This latter mechanism is not directly applicable to wireless carriers, who typically do not provide services and equipment directly to PSAPs and who, if they did, would not be rate-regulated for the purpose.

Nevertheless, a degree of consensus among Public Authorities seems to be building around the idea of covering or defraying the direct costs of the wireless carrier's connection from its Mobile Switching Center to the wireline network and any incidental costs evidently associated with that.[6] The wireless carrier's connection usually imposes direct and indirect costs on the Public Authority and perhaps the wireline carrier, each of which will have to see to recovery. On the other hand, it would not be far-fetched for a

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6 S. Robert Miller, "The Great Debate . . . who should pay for wireless enhanced 9-1-1?", *NENA News*, March 1998, 10-14. The author expresses the views of the Delaware Valley 9-1-1 Coalition and several other 9-1-1 Authorities, and not necessarily those of NENA, APCO or NASNA.

Public Authority to liken a wireless carrier to a newly-entering Competitive Local Exchange Carrier ("CLEC") who is expected to provide 9-1-1 service as a condition of doing business.

In the end, if CTIA can demonstrate that the public interest is being disserved by numerous Public Authorities who refuse to consider legislating public funds -- and that there is some need for Commission intervention -- the Joint Commenters would not oppose the requested clarification. However, for the Commission to declare that wireless carriers are not "solely" responsible for E9-1-1 upgrades does not answer the question of cost apportionment. Nor would we want the FCC to attempt to solve the whole problem. In Phase II's radiolocation systems, especially, there are too many dollars of cost -- as well as potentially large revenues in commercial exploitation -- to discern a single national solution at this time. CTIA is well aware that if Public Authorities are asked to fund Phase II, they will expect to reap its commercial benefits.

In short, the Joint Commenters have yet to be shown that the problem portrayed by CTIA actually exists, or that it would not be self-correcting without FCC intervention. If, nevertheless, some significant number of Public Authorities need to be re-directed toward what we have always thought were shared public and private burdens, we have no objection to the FCC's limited clarification. However, we are not convinced that the Commission must "ensure the development of uniform State or local cost recovery mechanisms." (Petition, 18)

Implemention of E9-1-1 should not
be suspended or deferred pending
improvements in carrier liability protection.

The Joint Commenters appreciate the concerns for liability protection expressed by both CTIA and BellSouth. We do not object to Commission consideration of wireless carrier filing of informational tariffs or contracts containing legally-sustainable limitations. We strongly object, however, to BellSouth's proposal that wireless carriers not be required to implement E9-1-1 in any state that does not limit wireless carrier liability for the service. What purpose is then achieved by the "self-help" of FCC informational tariffs or contracts? And why, in the absence of demonstrated threats of damaging litigation, should E9-1-1 implementation be forestalled by the very real potential for BellSouth to disagree with a given state over how much protection is enough?

If tariffs or contracts are to be considered by the FCC, we believe Petitioners should answer these questions:

- Do you mean the tariffs/contracts to cover only non-subscribers?
- If you would include subscribers under the documents as well, would you delete liability language from individual customer contracts, so as to avoid any confusion arising from potentially differing expressions?
- Do you intend to file tariffs/contracts only as to operations in states having no liability protection for wireless carriers?
- If you mean to file for states having some form of protection, would the document replicate the state law?
- If your tariff would exceed state law, are you asking the FCC to countenance this variation?

• How do you intend to publicize the existence of the tariffs/contracts and promote access to them?

We support universal 9-1-1 and federal assistance in facilities siting, but not at the expense of E9-1-1 delay.

We believe the Commission implicitly has reserved 9-1-1 as the national number to dial for wireline or wireless access to emergency assistance (CTIA Petition, 4), but would have no objection to some further expression of the point. We agree with CTIA that this number assignment, useful as it is, must remain non-exclusive or non-preemptive as to the states until Congress declares otherwise. We strongly disagree, however, that any FCC declaration on 9-1-1 number universality must be a "condition precedent to enforcing CMRS carriers' obligations to forward all non-subscriber calls." (Petition, 2)

Similarly, we believe Congress and the President already have acted to set the stage for siting of wireless facilities on federal lands. (Petition, 8-9) The FCC can decide for itself whether to add its own encouragement, and we would not object. But we surely oppose CTIA's proposition that unless and until the Commission acts, "it should stay the application of its [E9-1-1] rules." (Petition, 9)

We support placing the six-month lead in the rule, and welcome discussion of handset-based solutions in Phase II.

The text of the First Order provided a carrier with at least six months from the date of a PSAP's request to implement Phase I or Phase II. 11 FCC Rcd at 18709, 18711. We agree that this grace period should be inserted in the applicable rule.

We welcome and are prepared to contribute to discussion of handset-based solutions in Phase II. This was a subject that CTIA effectively ruled out of Consensus deliberations, believing that the industry was not ready to consider the consequences of cost to consumers. We are glad to hear that CTIA "does not seek reconsideration of the Commission's Phase II requirements." (Petition, 23) This will help the Joint Commenters to maintain the following objectives:

- No compromising of the accuracy standard;
- No differentiation of the accuracy standard by type of phone;
- Effective radiolocation across system and state boundaries;
- No compromising of implementation deadlines.

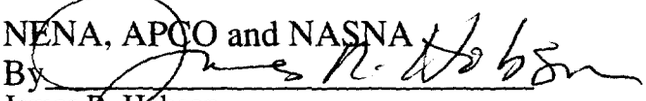
With specific regard to the latter, a decision to apply ALI standards prospectively to new types of handsets should not change the overall system rules for radiolocation (although rule waiver remains a possibility if legal standards are met).

CONCLUSION

For the reasons discussed, the Commission should reject certain of the CTIA and BellSouth requests and entertain others.

Respectfully submitted,

NENA, APCO and NASNA

By 

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March 18, 1998

THEIR ATTORNEYS

Recommendation

for the implementation of

Enhanced MF Signaling,

E9-1-1 Tandem to PSAP

NENA Technical Reference

NENA 03-002, November 18, 1997

Recommendation for Enhanced MF Signaling,

E9-1-1 Tandem to E9-1-1 PSAP

Prepared by:

National Emergency Number Association (NENA)

Network Technical Committee

NENA

Printed in U.S.A.

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NENA

TECHNICAL REFERENCE

Disclaimer

This Technical Reference is published by the National Emergency Number Association (**NENA**) as a guide and recommendation for designers and manufacturers of Enhanced 9-1-1 selective routing tandems and customer premise systems. It is not intended to provide complete design specifications or parameters, nor to assure the quality of performance of such equipment.

NENA reserves the right to revise this Technical Reference for any reason, including but not limited to, conformity with criteria or standards promulgated by various agencies, utilization of advances in the state of the technical arts or to reflect changes in the design of equipment for services described therein.

It is possible that certain advances in technology will precede these revisions. Therefore, this Technical Reference should not be the only source of information used to purchase selective routing tandems, customer premises equipment and/or Enhanced MF Signaling protocol functionality for either. NENA members are urged to contact their local telephone company representative to ensure compatibility with the Telco network.

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1. INTRODUCTION

1.1 Purpose

This NENA Technical Reference defines the use of a Feature Group D like signaling protocol between the E9-1-1 selective routing tandem and E9-1-1 customer premise equipment (CPE) which is called "Enhanced MF Signaling". This document does not suggest the implementation of Feature Group D trunking - there are tariff issues associated with FGD that do not apply to 9-1-1. Rather, it recommends borrowing the "off the shelf" MF signaling protocol from Feature Group D in order to facilitate the delivery of one or two ten-digit ANI's to the PSAP over existing facilities, without creating an entirely new protocol.

1.2 Overview and Benefits

This Technical Reference is a guide for designers and manufacturers of selective routing tandems and PSAP CPE. It may also be of value to purchasers, maintainers and users of such equipment.

This document describes the use of a Enhanced MF Signaling in place of the protocol described in Bellcore Technical Reference TR-TSY-000350. It does not recommend any changes to, or the replacement of, in-place multi-frequency (MF) signaling used between the E9-1-1 selective routing tandem and the E9-1-1 PSAP CPE, nor does this document recommend any other modifications to selective routing tandems or CPE, beyond those necessary to implement Enhanced MF Signaling

The purpose of utilizing Enhanced MF Signaling is to facilitate the delivery of one or two ten-digit ANI transmissions to the PSAP. The protocol supports both.

The existing protocol, as described in Bellcore TR-TSY-000350, limits the PSAP to receiving 9-1-1 calls from callers in up to four area codes only. The implementation of Enhanced MF Signaling removes that limitation by delivering all ten digits of the caller's telephone number.

Enhanced MF Signaling also provides for the delivery of two ten-digit numbers to the PSAP. This capability is required to implement Phase 1 of FCC Report and Order 96-264 (also commonly known as FCC Docket 94-102), the delivery of a wireless 9-1-1 caller's ten digit callback number plus a ten digit number that identifies the cell/sector through which the call originated.

Reason for Reissue

NENA reserves the right to modify the Technical Reference. Whenever it is reissued, the reason(s) will be provided in this paragraph.

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1.5 Acronyms and Terms

Acronym/Term	Definition
Automatic Location Identification (ALI)	A 9-1-1 feature by which the name, address and responding agencies associated with the number of the telephone used to dial 9-1-1 is displayed at the PSAP at the time the call is answered

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I certify that copies of the foregoing Opposition and Comments were served today by hand or by first-class mail, postage prepaid, on the following:

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